

CLAIMS:

1. A process for preparing of an extract from the plant *Murraya koenigii*, useful in the treatment of asthma, said process comprising the steps of pulverising plant materials obtained from plant *Murraya koenigii*, extracting the plant material with a solvent at ambient temperature, concentrating the extract by filtering and evaporating it under reduced pressure and lyophilizing the concentrate to obtain a lyophilized extract containing active principles of the plant *Murraya koenigii*.
2. A process as claimed in claim 1 wherein the plant materials are obtained from plant parts of *Murraya koenigii* selected from garden fresh leaves or leaves dried under shade.
3. A process as claimed in claim 1 wherein the leaves are pulverized by conventional methods to get homogenized leaves.
4. A process as claimed in claim 1 wherein the plant materials are extracted with solvents selected from hydrocarbon solvents, chlorinated solvents, ester solvents, ketonic solvents, alcohols, water and buffers.
5. A process as claimed in claim 4 wherein the solvents are selected from the group consisting of petroleum ether (BP 40 – 60°C), petroleum ether (60°C - 80°C), benzene, pentane, hexane, chloroform, dichloromethane, carbon tetrachloride, diethyl ether, tetrahydrofuran, dioxane, acetone, cyclopentanone, ethyl acetate, ethyl formate, methanol, ethanol, n-butanol, water and buffers.
6. A process as claimed in claim 1 wherein the concentration of the extract is effected by filtering and evaporating the solvents under reduced pressure at a temperature range of 20°C – 80°C preferably at ambient temperature and lyophilizing the concentrate by conventional methods to obtain mixtures of the active factors.
7. A process as claimed in claim 1, where in the extract obtained from the plant *Murraya koenigii* comprises active principles which dark colored solids soluble in dimethylsulfoxide.
8. A process as claimed in claim 1, wherein the active principles obtained from the plant *Murraya koenigii* are biocompatible and non-toxic in nature.
9. A process as claimed in claim 1, wherein the pharmaceutical composition is used for inhibition of arachidonic acid oxidation.

10. A process as claimed in claim 1, wherein the active principles have  $R_f$  values 0.73, 0.60, 0.34 and 0.14 in chloroform and methanol in the ratio 19:1 and  $R_f$  values 0.60, 0.38, 0.24 and 0.15 in the chloroform.
11. A process as claimed in claim 1 wherein the active principles have four peak with retention time 3.37, 3.49, 4.0 and 5.69 in methanol as solvent at 254nm.
12. A process as claimed in claim 1 wherein the extraction process is carried out for a period ranging from 1 - 120 hrs, preferably between 12 - 16 hrs.
13. Pharmaceutical composition useful in the treatment of asthma, said composition comprising an effective amount of extract obtained from the plant *Murraya koenigii* together with, or optionally associated with a pharmaceutically acceptable additive.
14. A composition as claimed in claim 13 wherein the additives comprise powder or extracts of plants selected from *M. paniculate* Linn, *H. abelmoschus*, *T. ammi*, *S. aromaticum*, *A. vasica* Nees, *E. hirta*, and *M. koenigii*.
15. A composition as claimed in claim 13 wherein the additives are present in the range of 80-100 mg of *M. paniculate* Linn, 40-60 mg of *H. abelmoschus*, 38-62 mg of *T. ammi*, 7-13 mg of *S. aromaticum*, 85 - 115 mg of *A. vasica* Nees and 90-110 mg of *E. hirta*.
16. A composition as claimed in claim 13 comprising :

<i>M. paniculata</i> Linn. Syn. <i>M. exotica</i> (KAMINI)	90mg
<i>H. abelmoschus</i> (JOWAN)	50mg
<i>T. ammi</i> (LAVANGA)	50mg
<i>S. aromaticum</i> (BASAK)	10mg
<i>A. vasica</i> Nees (PUSITOA)	100mg
<i>E. hirta</i>	100mg
<i>M. koenigii</i> (Suravi Neem)	100mg

Pub 99

17. A composition as claimed in claim 13 wherein the extract of the plant *M. koinegii* is present in the range of 87-105 mg per dose.
18. A composition as claimed in claim 13 wherein the additives are preferably present in an amount 90 mg of *M. paniculate* Linn, 50 mg of *H. abelmoschus*, 50 mg of *T. ammi*, 10 mg of *S. aromaticum*, 100 mg of *A. vasica* Nees, 100 mg of *E. hirta*, and 100 mg of *M. koinegii*. per dose.
19. A composition as claimed in claim 13 wherein the extract of the plant *M. koinegii* comprises active principles which are dark colored solids, soluble in dimethylsulfoxide.
20. A composition as claimed in claim 13 wherein the active principles have  $R_f$  values 0.73, 0.60, 0.34 and 0.14 in chloroform and methanol in the ratio 19:1 and  $R_f$  values 0.60, 0.38, 0.24 and 0.15 in the chloroform.
21. A composition as claimed in claim 13 having four peak with retention time 3.37, 3.49, 4.0 and 5.69 in methanol as solvent at 254nm.
22. A composition as claimed in claim 13 wherein the active principles obtained from the plant *M. koinegii* exhibit antioxidant property i.e.  $O_2$  inhibition.
23. A method for the treatment of asthma, said method comprising the steps of administering an effective amount of the composition as claimed in claim 13 to a subject in need thereof,
24. A method as claimed in claim 23 wherein the lyophilized extract obtained from *Murraya Koenigii* is administered along with other conventional additives for the treatment of asthma.
25. A method as claimed in claim 23 wherein the mode of administration is oral for the treatment of mild or acute asthma.
26. A method as claimed in claim 23 wherein the dosage level of the composition is in between 325-600 mg twice daily for the period ranging from 3 to 30 days.
27. A method as claimed in claim 23 wherein the dosage level is in between 325-600 mg twice daily for the period ranging from 3 to 15 days for mild asthmatic condition, and 15 - 30 days for acute asthmatic condition.
28. A method as claimed in claim 23, wherein the additives are selected from *M. paniculate* Linn, *H. abelmoschus*, *T. ammi*, *S. aromaticum*, *A. vasica* Nees, *E. hirta*, and *M. koinegii*.

29. A method as claimed in claim 23, where in the additives are present in a range of 80-100 mg of *M. paniculate* Linn, 40-60 mg of *H. abelmoschus*, 38-62 mg of *T. ammi*, 7-13 mg of *S. aromaticum*, 85-115 mg of *A. vasica* Nees, 90-110 mg of *E hirta*, and 87-105 mg of *M. koinegii*. per dose.
30. A method as claimed in claim 23, wherein the additives are preferably present in an amount 90 mg of *M. paniculate* Linn, 50 mg of *H. abelmoschus*, 50 mg of *T. ammi*, 10 mg of *S. aromaticum*, 100 mg of *A. vasica* Nees, 100 mg of *E hirta*, and 100 mg of *M. koinegii*. per dose.
31. A method as claimed in claim 23, wherein the additives *M. paniculate* Linn, *H. abelmoschus*, *T. ammi*, *S. aromaticum*, *A. vasica* Nees, *E hirta*, and *M. koinegii* are administered to include properties such as antidiarrhoeal, antiseptic, carminative, stimulation, anti-cough, anti- bronchitis and nourishment.
32. A method as claimed in claim 23, wherein the additives are obtained from :  
*M. paniculate* Linn (bark or root), *H. abelmoschus* from dried flower buds, *T. ammi* from leaves, *S. aromaticum* from whole plant *A. vasica* Nees from root, *E hirta* from bark, and *M. koinegii* from leaves.
33. An anti-oxidant composition for human beings and animals, said composition comprising a effective amount of extract obtained from the plant *Murraya Koenigii* together with or optionally, associated with pharmaceutically acceptable additives.
34. A composition as claimed in claim 33 wherein additives comprise powder or extracts of plants selected from *M. paniculate* Linn, *H. abelmoschus*, *T. ammi*, *S. aromaticum*, *A. vasica* Nees, *E hirta*, and *M. koinegii*.
35. A composition as claimed in claim 33, wherein the additives are present in a range of 80-100 mg of *M. paniculate* Linn, 40-60 mg of *H. abelmoschus*, 38-62 mg of *T. ammi*, 7-13 mg of *S. aromaticum*, 85-115 mg of *A. vasica* Nees, 90-110 mg of *E hirta*, and 87-105 mg of *M. koinegii*. per dose.
36. A composition as claimed in claim 33, where in the additives are preferably present in an amount 90 mg of *M. paniculate* Linn, 50 mg of *H. abelmoschus*, 50 mg of *T. ammi*, 10 mg of *S. aromaticum*, 100 mg of *A. vasica* Nees, 100 mg of *E hirta*, and 100 mg of *M. koinegii*. per dose.

37. A composition as claimed in claim 33, wherein the additives *M. paniculate* Linn, *H. abelmoschus*, *T. ammi*, *S. aromaticum*, *A. vasica* Nees, *E. hirta*, and *M. koinegii* are added to provide properties namely, antidiarrhoeal, antiseptic, carminative, stimulation, anti-cough, anti-bronchitis and nourishment, respectively.
38. A composition as claimed in claim 33, wherein the additives are selected from *M. paniculate* Linn, *H. abelmoschus*, *T. ammi*, *S. aromaticum*, *A. vasica* Nees, *E. hirta*, and *M. koinegii* in the form of bark or root; seed; fruit; dried flower buds; leaves; whole plant; and root, bark, leaves, respectively.
39. Use of the extract obtained from the plant *Murraya koinegii* for the treatment of asthma.
40. An anti-asthma agent obtained from the plant *Murraya koinegii*.